

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) [A] An isolated polynucleotide encoding a cytolethal distending toxin, which is any one of:

(a) a polynucleotide encoding a polypeptide comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 2 ~~to 4~~;

(b) a polynucleotide comprising ~~any one of~~ the nucleotide sequences of position 1 to 777, 802 ~~to 1605~~, and 1615 ~~to 2187~~ in the nucleotide sequence of SEQ ID NO: 1;

(c) a polynucleotide encoding a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one ~~or more~~ to 30 amino acids in ~~any one of~~ the amino acid sequences of SEQ ID NO:2, or NOs: 2 to 4;

(d) a polynucleotide that hybridizes under a stringent condition of 1x SSC, 0.1% SDS, and 37°C to DNA comprising ~~any one of~~ the nucleotide sequences of position 1 to 777, 802 ~~to 1605~~, and 1615 ~~to 2187~~ in the nucleotide sequence of SEQ ID NO: 1;

~~—— (e) a polynucleotide encoding a polypeptide comprising the amino acid sequence of any one of SEQ ID NOs: 52 to 54;~~

~~—— (f) a polynucleotide comprising any one of the nucleotide sequences of position 1 to 702, 778 to 1629, and 1632 to 2177 in the nucleotide sequence of SEQ ID NO: 51;~~

~~—— (g) a polynucleotide encoding a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one or more amino acids in the amino acid sequence of any one of SEQ ID NOs: 52 to 54; and~~

~~—— (h) a polynucleotide that hybridizes under a stringent condition to DNA comprising any one of the nucleotide sequences of position 1 to 702, 778 to 1629, and 1632 to 2177 in the nucleotide sequence of SEQ ID NO: 51.~~

2. (Original) A vector comprising the polynucleotide of claim 1.

3. (Original) A host cell containing the polynucleotide of claim 1 or the vector of claim 2.

4. (Currently Amended) [A] An isolated polypeptide having cytolethal distending toxin activity, which is selected from the group consisting of: ~~encoded by the polynucleotide of claim 1~~

- (a) a polypeptide comprising the amino acid sequence SEQ ID NO:2;
- (b) a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one to 30 amino acids in any one of the amino acid sequences of SEQ ID NO:2; and
- (c) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

5. (Currently Amended) A method for producing a cytolethal distending toxin ~~the polypeptide of claim 4~~, which comprises the step of culturing the host cell of claim 3 and collecting the produced polypeptide from the host cell or the culture supernatant.

6. – 30. (Canceled)